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EXAMINER				
MISLEH, JUSTIN P				
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2622				

DATE MAILED: 06/16/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/853,197

Applicant(s)

INAGAKI, ATSUSHI

Examiner

Justin P. Misleh

Art Unit

2622

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply:

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 04 April 2006.  
2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1 - 17 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1 - 17 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.  
10) ☒ The drawing(s) filed on 11 May 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some \* c) ☐ None of:  
1. ☒ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)  
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_  
5) ☐ Notice of Informal Patent Application (PTO-152)  
6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on April 4, 2006 has been entered.

### ***Response to Arguments***

2. Applicant's arguments with respect to Claims 1 – 17 have been considered but are moot in view of the new grounds of rejection.

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. **Claims 1 – 6, 8 – 13, and 15 – 17** are rejected under 35 U.S.C. 102(e) as being anticipated by Kikuchi.

The Examiner notes Claims 1 – 6 and 8 – 13 are respective corresponding apparatus and method claims. Accordingly, they will be rejected together, respectively.

5. For **Claims 1 and 8**, Kikuchi discloses, as shown in figures 1 and 2, an image sensing apparatus (10), comprising:

an image sensor (16) that outputs an image signal of a subject;

an image display device (44) that displays an image based on said image signal obtained by said image sensor (16);

a display designating unit (56) that determines whether or not said image display device is in an image display ON state (see column 4, lines 66 and 67);

a focus evaluating value obtaining device (30) that obtains a focus evaluating value for adjusting a focus based on said image signal obtained by said image sensor (16); and

a control unit (38) that controls a change of reading manners of said image signal from said image sensor (16) for obtaining the focus evaluating value according to the determination of said display designating unit as to whether or not said image display device is in an image display ON state (see Examiner's detailed explanation below).

Kikuchi indicates that the automatic focus controlling method performs "hill-climbing control" (see column 3, lines 47 – 59). The hill-climbing automatic focus controlling method is a method in which the taking lens is moved in one direction at first and image contrast signals before and after the movement of the taking lens are compared with each other. If the contrast level increases, the taking lens is moved further in the same direction and if the contrast level decreases, the taking lens is moved in the opposite direction. After the comparison, if the

contrast level is decreased, the taking lens is moved back to the position where the level was decreased.

On the other hand, a manual focus controlling method does not require a plurality of image contrast signals to be read for a user to manually adjust the focus. In fact, Kikuchi discloses that a focus lens is controlled by a manual focus adjusting switch (68), operated by a user (see column 6, lines 5 – 10).

Clearly, there is a “change of reading manners of said image signal from said image sensor for obtaining the focus evaluating value” based upon automatic focus control or manual focus control. Furthermore, Kikuchi discloses, as shown in figure 2 and as stated in column 5 (lines 18 – 36) and in column 6 (lines 5 – 20), changing between automatic focus control and manual focus control based upon determining whether or not the image display device is turned ON or OFF (see Step S2 – figure 2). Accordingly, the “reading manners” are changed according to the determination “as to whether or not said image display device is in an image display ON state.”

6. As for **Claims 2 and 9**, Kikuchi indicates that the automatic focus controlling method performs “hill-climbing control” (see column 3, lines 47 – 59). The hill-climbing automatic focus controlling method is a method in which the taking lens is moved in one direction at first and image contrast signals before and after the movement of the taking lens are compared with each other. If the contrast level increases, the taking lens is moved further in the same direction and if the contrast level decreases, the taking lens is moved in the opposite direction. After the comparison, if the contrast level is decreased, the taking lens is moved back to the position where the level was decreased.

Accordingly, Kikuchi discloses wherein said reading manners include to read said image signal from a portion of said image sensor, and the portion includes a focusing signed detecting area.

7. As for **Claims 3 and 10**, Kikuchi discloses, as stated in column 3 (lines 5 – 32), that the image signal appearing on the image sensor (16) comprises a portion of the image signal to be displayed on the display (44). Therefore, the entire image signal corresponds to a “display region of said image sensor”, as claimed.

Furthermore, Kikuchi indicates that the automatic focus controlling method performs “hill-climbing control” (see column 3, lines 47 – 59). The hill-climbing automatic focus controlling method is a method in which the taking lens is moved in one direction at first and image contrast signals before and after the movement of the taking lens are compared with each other. If the contrast level increases, the taking lens is moved further in the same direction and if the contrast level decreases, the taking lens is moved in the opposite direction. After the comparison, if the contrast level is decreased, the taking lens is moved back to the position where the level was decreased.

Therefore, it is clear that Kikuchi discloses wherein said reading manners includes to read said image signal from a display region of said image sensor when said display designating unit determines that said image signal is displayed by said image display device while said image sensing apparatus photographs said image signal, as claimed.

8. As for **Claims 4 and 11**, Kikuchi discloses, as stated in column 3 (lines 47 – 59), wherein said focus evaluating value is obtained based on a high frequency component of said image signal obtained by said image sensor.

9. As for **Claims 5 and 12**, Kikuchi describes a photographing process in column 4 (lines 7-40) in which it has been determined “at taken time (freeze picture) is output from the video monitor 44. The ordered steps in the photographing process include first capturing the image via the image sensor (16), processing the image via CPU (38), storing the image via flash memory (48), and THEN displaying the image via the monitor (44). These ordered steps clearly indicate an image is not displayed (i.e., prohibited) until a photographing process is completed. Of course, the video monitor switch (56) would have to indicate the video monitor (44) has been turned on.

Therefore, Kikuchi discloses a display prohibiting device that prohibits display of said image by said image display device at least until photographing processing is completed if said display designating unit determines that said image is displayed by said image display device while said image sensing apparatus photographs said sensed image signal.

10. As for **Claims 6 and 13**, Kikuchi discloses, as stated in column 3 (lines 47 – 59), further comprising a focus adjusting device (32) that adjusts a focus based on said focus evaluating value obtained by said focus evaluating value obtaining device (30).

11. For **Claim 15**, Kikuchi discloses, as stated in column 4 (line 56) – column 5 (line 18), “Control programs for controlling the operation of the digital still camera 10 are previously recorded into the flash memory 48. In accordance with the control programs, the CPU 38 performs processes in the respective modes.” Accordingly, Kikuchi discloses, “a storage medium in which a control program for controlling an image sensing apparatus is stored, wherein said control program comprising codes that, when executed, causes a computer to carry out the steps below.

Furthermore, Kikuchi additionally discloses, as shown in figures 1 and 2, an image sensing apparatus (10), comprising:

- an image sensor (16) that outputs an image signal of a subject;

- an image display device (44) that displays an image based on said image signal obtained by said image sensor (16);

- a display designating unit (56) that determines whether or not said image display device is in an image display ON state (see column 4, lines 66 and 67);

- a focus evaluating value obtaining device (30) that obtains a focus evaluating value for adjusting a focus based on said image signal obtained by said image sensor (16); and

- a control unit (38) that controls a change of reading manners of said image signal from said image sensor (16) for obtaining the focus evaluating value according to the determination of said display designating unit as to whether or not said image display device is in an image display ON state (see Examiner's detailed explanation below).

Kikuchi indicates that the automatic focus controlling method performs "hill-climbing control" (see column 3, lines 47 – 59). The hill-climbing automatic focus controlling method is a method in which the taking lens is moved in one direction at first and image contrast signals before and after the movement of the taking lens are compared with each other. If the contrast level increases, the taking lens is moved further in the same direction and if the contrast level decreases, the taking lens is moved in the opposite direction. After the comparison, if the contrast level is decreased, the taking lens is moved back to the position where the level was decreased.



On the other hand, a manual focus controlling method does not require a plurality of image contrast signals to be read for a user to manually adjust the focus. In fact, Kikuchi discloses that a focus lens is controlled by a manual focus adjusting switch (68), operated by a user (see column 6, lines 5 – 10).

Clearly, there is a “change of reading manners of said image signal from said image sensor for obtaining the focus evaluating value” based upon automatic focus control or manual focus control. Furthermore, Kikuchi discloses, as shown in figure 2 and as stated in column 5 (lines 18 – 36) and in column 6 (lines 5 – 20), changing between automatic focus control and manual focus control based upon determining whether or not the image display device is turned ON or OFF (see Step S2 – figure 2). Accordingly, the “reading manners” are changed according to the determination “as to whether or not said image display device is in an image display ON state.”

12. As for **Claim 16**, Kikuchi indicates that the automatic focus controlling method performs “hill-climbing control” (see column 3, lines 47 – 59). The hill-climbing automatic focus controlling method is a method in which the taking lens is moved in one direction at first and image contrast signals before and after the movement of the taking lens are compared with each other. If the contrast level increases, the taking lens is moved further in the same direction and if the contrast level decreases, the taking lens is moved in the opposite direction. After the comparison, if the contrast level is decreased, the taking lens is moved back to the position where the level was decreased.

Accordingly, Kikuchi discloses wherein said reading manners include to read said image signal from an entire region of said image sensor when said display designating unit determines

that said image signal is displayed by said image display device while said image sensing apparatus photographs said image signal.

13. For **Claim 17**, Kikuchi discloses, as shown in figures 1 and 2, an image sensing apparatus (10), comprising:

an image sensor (16);

a display (44) configured to display image based on said image signal obtained by said image sensor (16);

a designation unit (56) configured to determine whether or not said display is in an image display ON state (see column 4, lines 66 and 67);

a calculation unit (30) configured to calculate a focus evaluating value for focus adjustment based on said image signal obtained by said image sensor (16); and

a control unit (38) configured to control a change of reading manners of said image signal from said image sensor (16) for obtaining the focus evaluating value according to the determination of said display designating unit as to whether or not said image display device is in an image display ON state (see Examiner's detailed explanation below).

Kikuchi indicates that the automatic focus controlling method performs "hill-climbing control" (see column 3, lines 47 – 59). The hill-climbing automatic focus controlling method is a method in which the taking lens is moved in one direction at first and image contrast signals before and after the movement of the taking lens are compared with each other. If the contrast level increases, the taking lens is moved further in the same direction and if the contrast level decreases, the taking lens is moved in the opposite direction. After the comparison, if the

contrast level is decreased, the taking lens is moved back to the position where the level was decreased.

On the other hand, a manual focus controlling method does not require a plurality of image contrast signals to be read for a user to manually adjust the focus. In fact, Kikuchi discloses that a focus lens is controlled by a manual focus adjusting switch (68), operated by a user (see column 6, lines 5 – 10).

Clearly, there is a “change of reading manners of said image signal from said image sensor for obtaining the focus evaluating value” based upon automatic focus control or manual focus control. Furthermore, Kikuchi discloses, as shown in figure 2 and as stated in column 5 (lines 18 – 36) and in column 6 (lines 5 – 20), changing between automatic focus control and manual focus control based upon determining whether or not the image display device is turned ON or OFF (see Step S2 – figure 2). Accordingly, the “reading manners” are changed according to the determination “as to whether or not said image display device is in an image display ON state.”

### ***Claim Rejections - 35 USC § 103***

14. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

15. **Claims 7 and 14** are rejected under 35 U.S.C. 103(a) as being unpatentable over Kikuchi.

The Examiner notes Claims 7 and 14 are respective corresponding apparatus and method claims. Accordingly, they will be rejected together, respectively.

16. As for **Claims 7 and 14**, Kikuchi discloses, as sated in column 4 (line 56) – column 5 (line 17), a video monitor switch (56) for controlling the power supply to the video monitor (44) and a set status display device (70) for displaying set statuses of the operation modes of the digital camera. Although, Kikuchi does not disclose wherein determination by said display designating unit is stored in a memory as an image display flag.

However, **Official Notice** (MPEP § 2144.03) is taken that both the concepts and advantages of designation by said display designation unit/step is stored in a memory as an image display flag are well known and expected in the art. At the time the invention was made, it would have been obvious to one with ordinary skill in the art to have for the advantage of *providing a readily upgradeable method of operation.*

### ***Conclusion***

17. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Justin P Misleh whose telephone number is 571.272.7313. The Examiner can normally be reached on Monday through Friday from 8:00 AM to 5:00 PM.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, David L Ometz can be reached on 571.272.7593. The fax phone number for the organization where this application or proceeding is assigned is 571.273.3000.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications

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may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JPM

June 10, 2006

A handwritten signature in black ink, appearing to read 'David Ometz', with a long horizontal stroke extending to the right.

DAVID OMETZ  
SUPERVISORY PATENT EXAMINER